high melting point to successfully store the other fission products, and thereafter

placing the other fission products in a capsule container having a container core to hold the other fission products and an outer cover to encase the other fission products,

said outer cover being a corrosion resistant material with sufficient strength, density, and thermal conductivity to avoid environmental corrosion over time, and being of a dimensional configuration such that radiation outside the container does not exceed safety limits, and such that the outside surface of the container is of a sufficiently high temperature to melt ice found in permanent icefields, yet is not sufficiently high to seriously enhance corrosion of the container.

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3. (Amended)

The method of claim 1 wherein the other fission products ~~of the core~~ are oxides in a lead matrix.

4. (Amended)

The method of claim 1 wherein the storing for a time sufficient to let short life materials decay is at least ten years.

5. (Amended)

The method of claim 1 wherein the actinides are recycled for fuel use.

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8. (Amended)

A radiation waste container for use in storage of fission products separated from actinides in permanent ice, comprising:

a corrosion resistant container having a core filled with fission product separated from the actinides,

said fission product being in a metal matrix to successfully encapsulate and store said fission product,

said core and container being dimensionally configured such that radiation outside the container does not exceed safety limits and that the container surface reaches a temperature sufficiently high to melt ice, but not cause corrosion of the container surface.

11. (Amended)

The container of claim 8 wherein the metal matrix is deposited by electrochemical deposition.

12. (New)

A spherical radiation waste container for use in storage of fission products, separated from actinides in permanent ice, comprising:

a spherical corrosion resistant container having a core filled with said fission products separated from actinides,

said fission products being in a metal matrix of spherical configuration to successfully encapsulate and store said fission products,

said core and said metal matrix being dimensionally configured to define a waste container such that the radiation outside the waste container does not exceed safety limits and that the container surface reaches a temperature sufficiently high to melt ice, but not cause corrosion of the container surface, nor render the temperature at the center too high.

13. (New)

The container of claim 12 wherein the metal matrix is a lead matrix.

14. (New)

The container of claim 12 wherein the corrosion resistant container is stainless steel.